METROPOLITAN NASHVILLE AIRPORT AUTHORITY



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DIRECTOR OF FINANCE

804 12 2002

November 12, 2002

Mr. David L. Manning
Director of Finance
Metropolitan Government of Nashville of Davidson County
106 Metropolitan Court House
Nashville, TN 37201

Dear Mr. Manning:

This letter is acknowledgement that the Metropolitan Nashville Airport Authority (MNAA) has received the Audit Report (Report) recently completed by KPMG on behalf of the Metropolitan Government of Nashville and Davidson County Department of Finance.

After thorough review of the Report, the MNAA agrees with the findings that the MNAA adopt a formal debt management policy and retain the services of an independent financial adviser. We are determined to evaluate all of the other issues raised in the Report. Additional comments to specific findings are included in the attached staff analysis.

We would like to express our appreciation again for your assistance and cooperation during this process. Any improvements we can make in our financial practices benefit the MNAA as well as the customers and community we serve.

Sincerely,

Raul L. Regalado President and CEO

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Attachment

INTEROFFICE MEMORANDUM

TO:

RAUL REGALADO

FROM:

DOLLO WOLFE T

SUBJECT:

KPMG AUDIT RESPONSES

DATE:

11/12/2002

As you know, our nation has seen many changes in the economy since the tragic events of September 11, 2001. In response to these economic shifts, airports across our country are reevaluating their financial decisions and practices. Thus, we appreciate the fact that the Finance Department for Metropolitan Nashville and Davidson County retained KPMG LLP (KPMG) to review the Airport Authority's derivative transactions as we continuously strive to improve our policies and financial practices. The Executive Summary report by KPMG recommends some valid practices to be implemented.

In reviewing KPMG's analysis of our derivative transactions, it is of our opinion that KPMG did not fully address or recognize the following:

- Business Purpose The events of September 11, 2001 significantly impacted the
 Airport's cash projections. Based on these projections, there was a high probability
 that we would be in default to certain debt covenants. At that time, short-term
 borrowings were not feasible and long-term debt would not positively impact our
 situation; the Knock-In Barrier Swap provided the best option for providing additional
 funds to comply with the Authority's debt covenants.
- Probability of Deliverance KPMG's analysis did not address the likelihood of the
 options ever being delivered to MNAA on the Knock-In Barrier Swap. In a review
 preformed by our consultant, Deloitte & Touche LLP, the likelihood that MNAA
 will pay the counterparty any money is 1% or less. Thus, the positive cash flow impact
 to MNAA is approximately \$3.85 million.
- Uniqueness of Transaction In their report, KPMG stated that airports and taxexempt revenue bond issuing institution have entered into <u>basic</u> interest rate swap
 agreements, however they were unaware of any such institutions entering into swap
 agreements similar to MNAA's. Despite the information provided in the analysis by
 KPMG, there are several examples of airports and other municipalities having used this
 type of derivative transactions including:

- o Philadelphia International Airport
- Tampa International Airport
- o Orlando International Airport
- o Pennsylvania Intergovernmental Cooperation Authority
- o Alabama Public Schools and College Authority
- o City of Chicago

Attached are specific responses to the KPMG report findings. MNAA management has reviewed KPMG's recommendations and found that in light of the recent economic and the financial challenges faced by the airline industry, the Authority's decisions to participate in the reviewed derivative transactions to be of sound judgment. This decision was not only supported by extensive research by the Authority, but was reiterated by an attached report created independently by our consultant, Deloitte & Touche LLP.

MNAA Management Responses to a KPMG Review of Certain Derivative Contracts Executed by MNAA

This a response by management of the Metropolitan Nashville Airport Authority ("MNAA") to the report prepared by KPMG LLP ("KPMG") at the request of the Internal Audit Section of the Finance Department for Metropolitan Nashville and Davidson County ("METRO"). KPMG was retained by METRO to review the derivative usage of MNAA. This included reviewing the risk monitoring and risk management of MNAA, the economic sensitivity of existing derivative contracts to financial market changes, and MNAA's counterparty risks.

Since the KPMG report predominantly covers one derivative transaction, the Knock-In Barrier Swap, our responses will be limited to the KPMG Executive Summary. We will provide an overall response to the report (i.e. a MNAA executive summary similar to the one prepared by KPMG), and we will provide feedback/responses to various points made in the report.

MNAA Executive Summary:

Management of MNAA takes the role of representing the traveling public in Middle Tennessee and surrounding regions seriously in managing the Nashville International Airport. Our stewardship includes evaluating all financial instruments, including derivatives, which are economically advantageous for MNAA. We do not enter into derivative transactions lightly, and all such transactions require the approval of both the Airline Affairs Committee (comprised of the signatory airlines serving the Nashville International Airport) and the MNAA Board of Commissioners. We have a good track record of managing the costs of the Nashville International Airport. The Nashville International Airport's costs to the airlines are among the lowest in the country (confirmed by KPMG in their report on page 7), which has resulted in the favorable air service that our community enjoys today. We do not feel the air service at the Nashville International Airport or our financial condition would be in the position it is today if we had not taken advantage of the financing structures similar to the subject of this review.

KNOCK-IN BARRIER SWAP

In order to help fund the Nashville International Airport's capital budget for fiscal year 2002 (July 1, 2001 to June 30, 2002), we included cash proceeds from a Knock-In Barrier Swap. Prior to preparing our FY '02 budget, we received various financing proposals from different entities. In determining which transaction to consummate, we reviewed such things as risk, MNAA objectives, and airline objectives. Based upon our review, it was felt that a Knock-In Barrier Swap was the transaction most suitable for our needs. We presented this option to the signatory airlines that have majority-in-interest (MII) approval at the Nashville International

Airport to obtain their approval. The signatory airlines approved the use of such a financial transaction unanimously. Our Board via the approval of our FY '02 operating and capital budgets then approved this transaction in principal.

The tragic events of September 11, 2001 had a significant impact on the airline industry and a significant impact on our financial condition. Thus, during September and October of 2002, we performed numerous cash flow projections that were based upon the projected traffic of the airlines serving Nashville. These cash flow projections were unfavorable and indicated a strong possibility of MNAA not being in compliance with certain outstanding debt covenants. Thus, MNAA needed additional funds generated from sources other than long-term debt in order to remain in compliance with its debt covenants. After September 11, 2001, credit markets were not open to airports due to the volatility of the airline industry. Therefore, short-term borrowings were not feasible and could not help MNAA meet its debt covenants. As a result, we reviewed the financial feasibility of a Knock-In Barrier Swap and began the negotiation process to enter into a Knock-In Barrier Swap that was tied to the Bond Market Association ("BMA") Municipal Swap Index rate. Before entering into such an agreement, a financial and historical review of the BMA index was performed and concluded the following:

- > Since November 1981, the 6%, 6.5% and 7% BMA barriers had not been broken (sixmonth rolling average) since October 1990, September 1989, and September 1982, respectively.
- > The BMA has averaged on a six-month rolling average from November 1981 to October 3, 2001 greater than 6%, 6.5% and 7%, 134, 50, and 22 times, respectively. This translates to the fact that in the last 20 years, the BMA six month rolling average did not penetrate the aforementioned barriers 87%, 95% and 98% of the time.
- > The average BMA rate from the time frame of November 1981 to October 3, 2001 had been 4.41%.
- > The last ten-year average BMA rate through October 2001 had been 3.30%.

Based upon our review of the BMA/JJ Kenny indices, we recommended to the MNAA Board Finance Committee that we execute a Knock-In Barrier Swap containing barriers of 6%, 6.5% and 7%. The MNAA Board approved the execution of this transaction, and we began negotiating with the selected counterparty and executed the transaction, which resulted in a payment to MNAA in the amount of \$3,853,000.

MNAA MANAGEMENT RESPONSES TO KPMG EXECUTIVE SUMMARY:

In reviewing the Executive Summary prepared by KPMG, the following specific comments are provided:

> KPMG states Page 4, "Our review has concluded the derivatives have been priced with a 40% chance a breach will occur".

This is the essence of this particular transaction, because if the barriers are never breached, then MNAA received \$3.853 million dollars without having to repay any monies. Based on an analysis of historical data, the probability of the barriers ever being breached was determined to be very low (much lower than the 40% stated above). Due to this assertion, we commissioned Deloitte & Touche LLP to calculate the prospective probability. Their report is included as an attachment to our responses. Based upon their analysis, the lifetime cumulative likelihood to occur (or "LTO", i.e., the cumulative probability of the counterparty exercising the swaption) for the respective barriers are shown below:

Γ	Barrier	Prospective		
	Level	Probability as of July		
		31, 2002	24, 2001	
Γ	6.0%	1.03%	10.11%	
	6.5% *	0.01%	0.17%	
	7.0%	0.0017%	0.04%	

Following the calculation of the LTO, Deloitte & Touche calculated the cumulative expected values of payment (or "EVOP", i.e., the cumulative expected values of payments under the obligation). The expected value of (net) payments by MNAA to the counterparty are shown below:

Barrier	Expected Value of	Expected Value of Net
Level	Net Payments as of	Payments at the Time of
	July 31, 2002	Transaction,
		October 24, 2001
6.0%	\$2,578.21	\$35,327.54
6.5%	\$16.70	\$568.91
7.0%	\$1.18	\$42.29

On page 1 of the attached report by Deloitte & Touche it states,

"A probabilistic analysis of likelihood-to-occur and expected value of payments indicates that both at the time of the transaction and as recently as July 31, 2002 the likelihood-to-occur and the expected values of payments are extremely low compared to the value received by MNAA for entering into the instant obligation. By such measures, the transaction was extremely beneficial to MNAA."

Based on the analysis by Deloitte & Touche, as of July 31, 2002, the positive cash flow impact to MNAA will be in the range of \$3.850 to \$3.853 million or approximately 99.9% of the premiums received.

> On page two, KPMG states,

"...many of the financial decisions facing MNAA have the potential of creating conflicting objectives with the Airport Authority. Since the airlines servicing Nashville approve most financial decisions, there is the desire by these current users of the facility to approve decisions, which would benefit them currently. Such financial decisions may have the potential to disadvantage future users of the facility, such as new carriers or passengers, in the form of higher costs in the future."

MNAA makes decisions by weighing the benefits/costs of both the short term as well as the long term. These decisions must take into account what is best for the Authority, the community and current and future airlines serving the Airport.

> On page two, KPMG states,

"...the responsibility of MNAA should be one of selecting and presenting the best deals of the appropriate type for all beneficiaries of the airport authority rather than exercising market judgment to try to pick the optimal deal, such as speculating on interest rate directions."

We completely agree that the Authority's responsibility is one of selecting and presenting the best deals of the appropriate type for all beneficiaries of the Airport. We feel we carry out this responsibility in our management of the Nashville International Airport for all constituents. There is an appropriate time and place to use derivative transactions, but we do not believe that this constitutes a high degree of speculation.

> On page three, KPMG states,

"...If the BMA swap rate were to rise such that all three barriers were to breached, MNAA would have the effect of over half of its total debt being floating rate, with a spread of 1.2% over BMA as an interest rate for three quarters of floating rate exposure, which would be a drastic increase in borrowing costs from the current fixed level. For example, the 7.0% barrier swap, based upon the Series 1998 Revenue Bonds, has interest rates between 4.50% and 5.375%; the swap would have an interest rate of 8.20% or more at breach..."

We agree with the facts stated above by KPMG. However, KPMG did not address the likelihood that such an event will occur. Furthermore, they did not address the fact that the BMA index plus the premium would have to remain above our underlying fixed bond rates. Once again, it should be noted that, according to our consultant, the likelihood that the 7.0% barrier would be reached is 0.0017% and the overall expected payout relating to all of the swaptions is less than \$3,000, which does not appear to be a drastic increase in borrowing costs.

> On page three, KPMG states,

"In general, our review of other airports (including Denver International Airport and Dallas/Fort Worth International Airport) and tax-exempt revenue bond issuing institutions have shown an increasing acceptance of basic interest rate swap derivatives in their financial structure. These are used most commonly to affect lower cost borrowing, which meets the debt policy needs of the issuer. We have not seen derivative use of the complexity and speculative nature of that in place currently at MNAA, nor the use of derivatives as a potential alternative to debt issuance for long-term capital or working capital needs."

In the last year, the following airports have entered into swaptions similar to MNAA:

- Philadelphia International Airport
- > Tampa International Airport
- > Orlando International Airport

In addition, the following governmental entities have also entered into swaptions similar to MNAA in the last year:

- > Pennsylvania Intergovernmental Cooperation Authority
- Alabama Public Schools and College Authority
- > City of Chicago

On page three, KPMG states,

"MNAA does not appear to have an integrated debt management strategy." "We recommend MNAA adopt an integrated debt management strategy." "MNAA does not have a comprehensive derivative policy."

The Authority does not have a written debt management strategy. However, our informal debt management strategy has always been to reduce debt, lower our interest rates and extract value from our balance sheet. Staff is in the process of developing and implementing a written integrated debt management strategy and policy that will include a comprehensive derivative strategy.

> On page four, KPMG states,

"MNAA does not have the analytical capability to evaluate or monitor the swaptions it has sold and prospective arrangements of the recent type the agency has entered. This would require relatively sophisticated pricing and modeling software as well as a detailed understanding of derivative contracts and the key drivers to these contracts, which include yield curve shapes and the relationship of different yield curves to each other, the volatility of BMA, LIBOR and their underlying swap rates, the impact of the barriers and their average, versus absolute, exercise values and the pricing of the underlyings. MNAA, without these resources in-house, should look to retain a consultant to provide this level of detail on a recurring basis. We recommend MNAA either acquire the software and expertise to evaluate its current positions and prospective arrangements in in-house, or retain an independent advisor to perform this activity for them. As well, the board should request evaluation of the financial position, cash flow and bond covenants coverage for the airport authority both in strict terms and with all derivative exposures considered. This will allow for better forecasts of potential coverage issues."

The Authority agrees with the statement that it does not have the in-house resources to constantly monitor the value of the swaptions we have sold. Currently, the swaptions are valued on an annual basis to comply with FASB 133 for audited financial statement purposes. The Authority will consider retaining an independent advisor to perform recurring reviews of these swaptions.

> On page four, KPMG states,

"As well, the board should request evaluation of the financial positions, cash flow and bond covenant coverage for the airport authority both in strict terms and with all derivative exposures considered. This will allow for better forecasts of potential coverage issues."

In March of 2002, Leigh Fisher Associates completed a debt capacity study of MNAA. Their analysis focused on MNAA's ability to take on more debt while maintaining reasonable airline fees and charges. Their analysis stated that MNAA would be able to take on an additional \$100 million of variable-rate bonds and maintain airline payments per passenger within the industry average. Results of the study will be reviewed with the Board and can be made available to the Metro Department of Finance.

> On page four, KPMG states,

"...such a cost is ultimately borne by the greater Nashville community. Though the airlines would be required to initially fund the cashflow requirements, in the form of higher

landing fees and leases, this cost would be passed through to the users of the airport facility, creating a direct impact to the community."

It should be noted that airport costs to airlines nationwide make up less than 4%-6% of the ticket prices paid by the consumer. Furthermore, the airlines employ national pricing strategies, which are based on their total nationwide costs. The airline's ability to pass on costs to the consumer are limited to market demand and competing airlines.

> On page five, KPMG states the following in reference to the Knock-In Barrier Swap,

"...it does not appear a comprehensive review was performed to fully evaluate and present the financial and economic impact of the proposed transaction."

MNAA performed quantitative analysis on (1) the BMA and JJ Kenny indices since 1981, and (2) cash flow impacts from all three options being delivered and remaining above the fixed bond rate for six-month intermittent periods. This information was fully presented to the Board along with management recommendations. Thus, the transaction was fully evaluated by MNAA management, and the financial and economic impact of the transaction was properly presented to the MNAA Board.

> On page six, KPMG states the following in reference to the Knock-In Barrier Swap,

"The receipt of cash could have been replicated through working capital and other borrowings, which may have been difficult or expensive given the post September 11th economy and risks for airports."

KPMG recommends that the Airport could have acquired cash through other means, and immediately acknowledges that this may have been difficult or expensive. Due to fact that the credit markets were generally not available to the airline industry post September 11th, the Knock-In Barrier Swap was the best and most appropriate transaction to execute at that time.

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Deloitte & Touche

Report on the Probabilities and Expected

Values of Certain Swaption Transactions Between

Metropolitan Nashville Airport Authority ("MNAA") and Morgan Guaranty Trust

Company of New York ("MG") from October 26, 2001

A. General Summary

1. A probabilistic analysis of likelihood-to-occur and expected value of payments indicates that both at the time of the transaction and as recently as July 31, 2002 the likelihood-to-occur (or "LTO", i.e., the cumulative probability of MG exercising the swaption) and the expected values of payments (or "EVOP", i.e., the cumulative expected values of payments under the obligation) are extremely low compared to the value received by NAA for entering into the instant obligation. By such measures, the transaction was extremely beneficial to MNAA. To the extent MNAA entered into the transaction based on its perception of the low LTO and EVOP, its approach and decision at the time were economically sound and beneficial to its mission of obtaining funds on short notice at a limited cost and with limited exposure.

B. Qualifications

2. As Director of Economic Services in the Dispute Consulting & Corporate Forensic services practice of Deloitte & Touche's Financial Advisory Services organization, I provide economic, statistical and financial analysis to our firm's clients. In this capacity I work with a staff of seasoned professionals in the areas of economics, statistics, finance, accounting and advanced computational methods. I have been analyzing financial assets, liabilities and obligations in both academic and business settings for over 25 years. My curriculum vita is attached to this report.

C. The Transaction

3. MNAA entered into a set of swaption transactions with MG on October 26, 2001, for which it received \$3,853,000. Its obligation was to pay upon execution of the swaptions a floating rate of the Bond Market Association ("BMA") Municipal Swap



Index plus 120 basis points on the notional value of the following outstanding publicly issued bonds¹:

A. Issuance date: October 26, 2001
Final repayment date: July 1, 2019
Initial balance: \$53,500,000
Monthly interest rate: 4.865%

Barrier rate: 6.0%

Balance as of July 31, 2002: \$53,400,000

Premium Received on October 26, 2001: \$1,628,000

B. Issuance date: October 26, 2001 Final repayment date: July 1, 2015

Initial balance: \$64,730,000

Monthly interest rate: See Exhibit B of terms and conditions²

Barrier rate: 6.5%

Balance as of July 31, 2002: \$62,415,000

Premium Received on October 26, 2001: \$1,700,000

C. Issuance date: October 26, 2001
Final repayment date: July 1, 2016

Initial balance: \$29,355,000

Monthly interest rate: See Exhibit B of terms and conditions³

Barrier rate: 7.0%

Balance as of July 31, 2002: \$27,985,000

Premium Received on October 26, 2001: \$525,000

4. The swaption allowed MG to enter at anytime into a swap that would have MNAA pay a rate equal to the BMA plus 120 basis points in exchange for MG paying MNAA the fixed rate on the bonds if the average BMA exceeded in the prior six months the following hurdle rates:

Bond issue "A": 6.0 % Bond issue "B": 6.5 % Bond issue "C": 7.0 %

¹ The balance of each bond is repaid according to a set schedule which was provided by MNAA and included in the analysis.

² The fixed exchange rate is given in Exhibit B of the "terms and conditions of the Option on a Swap Transaction" dated October 26, 2001.

³ The fixed exchange rate is given in Exhibit B of the "terms and conditions of the Option on a Swap Transaction" dated October 26, 2001.

D. The Analysis

- 5. A probabilistic analysis of cumulative likelihood-to-occur and expected value of payments was performed based on a weekly simulation. It was assumed the transaction costs are negligible and thus in the future MG would exercise the swap at any point in which the hurdle rates were exceeded.
- According to the analysis the following, lifetime cumulative likelihood to occur applies to each bond:

Table 1

Bond Issue	At the Time of Transaction, October 24, 2001 ⁴	As of July 31, 2002 ⁵
A	10.11%	1.03%
В	0.17%	0.01%
С	0.04%	0.0017%

7. Following the calculation of LTO an analysis calculating the cumulative expected values of payments under the obligation, EVOP⁶, was performed. Under this analysis the net possible obligations (variable rate paid over fixed rate received) at each month end were factored by their respective probabilities to occur. The results were accumulated over the remaining life of the bonds, resulting in a cumulative-tomaturity expected value of (net) payments by the MNAA to MG, as follows;

Table 2

	At the Time of Transaction,	
Bond Issue	October 24, 2001 ⁷	As of July 31, 2002 ⁸
A	\$35,327.54	\$2,578.21
В	\$568.91	\$16.70
С	\$42.29	\$1.18

⁴ The actual transaction took place on October 26, 2001; however, the closest six-month average BMA data provided was as of October 24, 2001.

July 31, 2002 is the date of the most recent BMA index data provided to us.

⁶ Values were not adjusted for the time value of money; since most expected payments would have occurred in the future such an adjustment would further lower the EVOP.

⁷ The actual transaction took place on October 26, 2001; however, the closest six-month average BMA data provided was as of October 24, 2001.

§ July 31, 2002 is the date of the most recent BMA index data provided.

E. Disclaimers

- 8. The analysis reported upon herein is based on summary information received regarding the bonds the agreements and the transactions involved. The documents related to the bonds and the transaction have not been reviewed and may, upon review, cause a change in understanding of the facts and premises related to the analysis.
- The analysis reported upon herein is a probabilistic simulation and its results may differ for analyses employing other valuation techniques without casting doubt on their validity and efficacy.
- 10. This analysis was performed at the request of the MNAA for the purpose of assessing the economic ramification of its decision October 2001 to enter into the instant transactions and the result of the analysis and any information contained in this report may not be used for any other purpose.

11. The analysis reported on herein may be supplemented if and when additional information is brought to my attention.

* * * * *

Dov Frishberg, Ph.D.

10 - 8 - 02 Date